

Note that all the claims currently pending in this application, including those not presently being amended, have been reproduced below for the Examiner's convenience.

1. (Amended) An image forming apparatus comprising:

Q12 a cartridge detachably mounted thereon, said cartridge including a storage medium capable of storing electronic information and a part of plural process means for image formation including a photosensitive body on which an electrostatic latent image is formed, charging means for charging said photosensitive body, development means for developing the electrostatic latent image formed on said photosensitive body, and exposing means for exposing said photosensitive body;

means for detecting a driven amount of said cartridge; and

control means for changing exposure conditions for exposing said photosensitive body on the basis of the information stored in said storage medium,

wherein said storage medium stores, in advance (1) threshold information relating to a threshold value used to change the exposure conditions for said exposing means to expose said photosensitive body and (2) arithmetic coefficient information used to calculate the used amount of said cartridge, said storage medium having an area for storing information on the driven amount of said cartridge, and

wherein said control means calculates the used amount information of said cartridge on the basis of the driven amount information and the arithmetic coefficient information, and when a value obtained by the calculation of said control means reaches the threshold value, said control means changes the exposure conditions for said exposing means.

2. (Amended) An image forming apparatus according to claim 1, wherein the used amount information of said cartridge is the rotation time of said photosensitive body, the bias application time for said charging means, a value obtained by weighting the rotation

time using the arithmetic coefficient information, or a value obtained by weighting the bias application time using the arithmetic coefficient information.

Q12
(cont'd)

3. (Amended) An image forming apparatus according to claim 1, wherein said threshold information used to change the exposure conditions for said exposing means includes at least one of a value related to a manufacturing lot of said photosensitive body, a value related to an electrical characteristic of said charging means, and information related to the contact pressure of a cleaning blade abutting against said photosensitive body.

4. (Amended) An image forming apparatus according to claim 1, wherein said storage medium has a table corresponding to said threshold information and said exposure conditions.

Q13
5. (Amended) A cartridge detachably mountable on a main body of an image forming apparatus, the image forming apparatus including a photosensitive body on which an electrostatic latent image is formed, charging means for charging the photosensitive body, developing means for developing the electrostatic latent image formed on the photosensitive body, and exposing means for exposing the photosensitive body, said cartridge comprising:

a storage medium capable of storing electronic information,

wherein said storage medium stores, in advance, (1) threshold information relating to a threshold value used to change the exposure conditions for the exposing means to expose the photosensitive body and (2) arithmetic coefficient information used to calculate the used amount of said cartridge, said storage medium having an area for storing information on the driven amount of said cartridge.

A13
(cont'd)

7. (Amended) A cartridge according to claim 6, wherein the driven amount information of said cartridge is the rotation time of the photosensitive body or the bias application time for the charging means.

8. (Amended) A cartridge according to claim 6, wherein said threshold information used to change the exposure conditions for the exposing means includes at least one of a value related to a manufacturing lot of the photosensitive body, a value related to an electrical characteristic value of the charging means, and information related to the contact pressure of a cleaning blade abutting against the photosensitive body.

9. (Amended) A cartridge according to claim 6, wherein said storage medium has a table corresponding to said threshold information and said exposure conditions.

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10. (Amended) An image forming system for forming an image on a recording medium by using a cartridge detachably attachable to an image forming apparatus, said system comprising:

said cartridge; and

said image forming apparatus,

wherein said cartridge includes a storage medium capable of storing electronic information and a part of plural process means for image formation including a photosensitive body on which an electrostatic latent image is formed, charging means for charging said photosensitive body, and developing means for developing the electrostatic latent image formed on said photosensitive body,

wherein said image forming apparatus includes exposing means for exposing said photosensitive body, means for detecting a driven amount of said cartridge, and control

means for changing exposure conditions for exposing said photosensitive body on the basis of the information stored in said storage medium,

wherein said storage medium stores, in advance (1) threshold information relating to a threshold value used to change the exposure conditions for said exposing means to expose said photosensitive body and (2) arithmetic coefficient information used to calculate the used amount of said cartridge, said storage medium having an area for storing information on the driven amount of said cartridge, and

wherein said control means calculates the used amount information of said cartridge on the basis of the driven amount information and the arithmetic coefficient information, and when a value obtained by the calculation of said control means reaches the threshold value, said control means changes the exposure conditions for said exposing means.

Q14
(cont'd)

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12. (Amended) An image forming system according to claim 11, wherein the used amount information of said cartridge is the rotation time of said photosensitive body, the bias application time for said charging means, a value obtained by weighting the rotation time using the arithmetic coefficient information, or a value obtained by weighting the bias application time using the arithmetic coefficient information.

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13. (Amended) An image forming system according to claim 11, wherein said threshold information used to change the exposure conditions for said exposing means includes at least one of a value related to a manufacturing lot of said photosensitive body, a value related to an electrical characteristic of the charging means, and information related to the contact pressure of a cleaning blade abutting against said photosensitive body.

~~12~~ ¹³ (Amended) An image forming system according to claim ~~11~~ ⁹, wherein said storage medium has a table corresponding to said threshold information and said exposure conditions.

¹³ ~~16~~ (Amended) A storage medium for storing electronic information, wherein said storage medium is mounted on a cartridge detachably mountable on a main body of an image forming apparatus, wherein the image forming apparatus includes means for detecting a driven amount of the cartridge, a photosensitive body on which an electrostatic latent image is formed, charging means for charging the photosensitive body, developing means for developing the electrostatic latent image formed on the photosensitive body, and exposing means for exposing the photosensitive body,

wherein said storage medium stores, in advance (1) threshold information relating to a threshold value used to change exposure conditions for the exposing means to expose the photosensitive body and (2) arithmetic coefficient information used to calculate a used amount of the cartridge, and

wherein said storage medium has an area for storing information on the driven amount of the cartridge.

¹⁴ ~~17~~ (Amended) A storage medium according to claim ~~16~~ ¹³, wherein the arithmetic coefficient information used to calculate the used amount of the cartridge is information for weighting the rotation time of the photosensitive body or the bias application time for the charging means.

¹⁵ ~~18~~ (Amended) A storage medium according to claim ~~16~~ ¹³, wherein the threshold information used to change the exposure conditions for the exposure means to expose the photosensitive body includes at least one of a value related

(A15 cont'd)
to a manufacturing lot of the photosensitive body, a value related to an electrical characteristic value of the charging means, and information related to the contact pressure of a cleaning blade abutting against the photosensitive body.

A16
19. (Amended) A storage medium according to claim 13, wherein said storage medium stores a table corresponding to said threshold information and said exposure conditions.

Please add Claims 21 and 22 as follows:

A17
20. (New) A cartridge according to Claim 5, further comprising the photosensitive body, the charging means, and the developing means.

21. (New) A storage medium according to Claim 13 in combination with the cartridge, the cartridge comprising the photosensitive body, the charging means, the developing means.--

REMARKS

Summary

Amended independent Claims 1, 6, 11, and 16 recite at least one feature not disclosed or suggested in the patent to Okano. Therefore, should the outstanding rejection of these claims over this patent be withdrawn?

Status of the claims

Claims 4, 9, 14, and 19 have been canceled without prejudice. Claims 1-3, 5-8, 10-13, 15-18, and 20 have been amended to improve their form. Claims 1, 6, 11, and 16 have